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## TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number  
10/768.408

Filing Date  
1/30/04

First Named Inventor  
Shanbhag et al.

Art Unit  
TBD

Examiner Name  
TBD

Attorney Docket Number  
11471.00.0017

### ENCLOSURES (Check all that apply)

- Fee Transmittal Form
  - Fee Attached
- Amendment/Reply
  - After Final
  - Affidavits/declaration(s)
- Extension of Time Request
- Express Abandonment Request
- Information Disclosure Statement
- Certified Copy of Priority Document(s)
- Response to Missing Parts/ Incomplete Application
  - Response to Missing Parts under 37 CFR 1.52 or 1.53

- Drawing(s)
- Licensing-related Papers
- Petition
- Petition to Convert to a Provisional Application
- Power of Attorney, Revocation
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Remarks

- After Allowance communication to Group
- Appeal Communication to Board of Appeals and Interferences
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### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name  
Mark A. Dalla Valle  
Reg. No. 34,147

Signature

Date  
4/30/04

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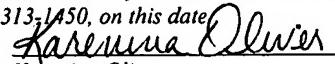
PATENT

-1-

UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of ) Group Art Unit: N/A  
SHANBHAG ET AL. )  
Application No. 10/768,408 ) INFORMATION DISCLOSURE  
Filed: January 30, 2004 ) STATEMENT  
For: DECISION FEEDBACK EQUALIZER )  
WITH DYNAMIC FEEDBACK ) Vedder, Price, Kaufman & Kammholz,  
CONTROL ) P.C.  
 ) 222 North LaSalle Street  
 ) Chicago, Illinois 60601  
 ) (312) 609-7500  
 )

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Date Karenina Oliver  
Karenina Oliver

Sir:

Submitted herewith are patents, publications or other information may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

This Information Disclosure Statement:

- (a) [ ] accompanies the new patent application submitted herewith. 37 CFR § 1.97(a).
- (b) [ ] is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR § 1.491.
- (c) [X] as far as is known to the undersigned, is filed before the mailing date of a first Office Action on the merits.
- (d) [ ] is filed after the first office action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final rejection or a notice of allowance, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR § 1.17(p) or a certification as specified in 37 CFR § 1.97(e), as checked below.
- (e) [ ] is filed after the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and is accompanied by the fee (\$180) set forth in 37 CFR § 1.17(i)(1) and a certification as specified in 37 CFR § 1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the

information disclosure statement.

[If either of boxes (d) or (e) are checked above, the following "certification" under 37 CFR § 1.97(e) may need to be completed.] The undersigned certifies that:

- (f) [ ] Each item of information contained in the information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- (g) [ ] No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this information disclosure statement.

A list of the patent(s) or publication(s) is set forth on the attached Form PTO-1449 (Modified).

A copy of the items on PTO-1449 (Modified) is supplied herewith:

(h) [ ] each      (i) [ ] none      (j) [X] only those listed below:

JOHN G. PROAKIS, Digital Communications Fourth Edition, 2001, pp.598-659, McGraw-Hill Companies, Inc., New York, NY

JOHN G. PROAKIS, Digital Communications Fourth Edition, 2001, pp. 660-708, McGraw-Hill Companies, Inc., New York, NY

HEINRICH MEYR ET AL., Digital Communication Receivers, Synchronization, Channel Estimation, and Signal Processing, 1998, pp. 270-323, John Wiley & Sons, Inc., New York, NY

Those patent(s) or publication(s) which are marked with an asterisk (\*) in the attached form PTO-1449 (Modified) are not supplied because they were previously cited by or submitted to the Office in a prior application no., filed and relied upon in this application for an earlier filing date under 35 U.S.C. § 120.

A concise explanation of relevance of the items listed on form PTO-1449 (Modified) is:

- (k) [X] not given
- (l) [ ] given for each listed item
- (m) [ ] given for only non-English language listed item(s) [Required]
- (n) [ ] is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references [copy attached].

The Examiner is reminded that a "concise explanation of the relevance" of the submitted items "may be nothing more than identification of the particular figure or paragraph of the patent or publication which has some relation to the claimed invention," MPEP § 609.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR § 1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR § 1.98 and MPEP § 609 and the Examiner is respectfully requested to consider the listed references.

- [ ] The Commissioner is hereby authorized to charge our Deposit Account No. 22-0259 for any fees required in connection with the filing of this Information Disclosure Statement. A **duplicate copy of this Notice is enclosed for this purpose.** In particular, in the event that an Office Action has crossed in the mail with this Information Disclosure Statement, the Commissioner is authorized to charge the above-named deposit account for any fees required pursuant to CFR §§ 1.17(p) or 1.17(i)(1).

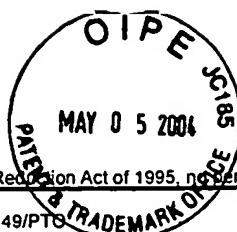
Respectfully submitted,

VEDDER, PRICE, KAUFMAN & KAMMOLZ, P.C.

By:   
Mark A. Dalla Valle  
Reg. No. 34,147

Attorney for Applicant(s)

Atty. Docket No: 11471.00.0017



PTO/SB/08A (02-03)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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~~Substitute for form 1449/PTO~~

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(Use as many sheets as necessary)**

Sh

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of 2

**Complete if Known**

Application Number	10/768,408
Filing Date	January 30, 2004
First Named Inventor	Shanbhag et al.
Art Unit	TBD
Examiner Name	TBD

Attorney Docket Number 11471.00.0017

**U. S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

<b>Examiner Signature</b>		<b>Date Considered</b>	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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Substitute for form 1449/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/768,408
				Filing Date	January 30, 2004
				First Named Inventor	Shanbhag et al.
				Art Unit	TBD
				Examiner Name	TBD
Sheet	2	of	2	Attorney Docket Number	
11471.00.0017					

#### OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.**

**Applicant's unique claim designation number (optional). –** Applicant is to place a check mark here if English is the language of the application.  
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